

# Environmental X-Ray Analytical Sensor



## DESCRIPTION:

The state of the art in X-ray fluorescence (XRF) spectroscopy now allows sensors to be constructed that meet requirements imposed by in situ and field deployment. These devices allow elements to be sampled in concentrations of parts per million (ppm). Miniaturized XRF sensors can be incorporated in systems for lowering into tanks or bilges or performing nondestructive materials evaluation.

NRL has developed a cone penetrometer XRF system for in situ analysis of subsurface soil or underwater sediment.

## ADVANTAGES/FEATURES:

- Rapid, in situ characterization of any solid or liquid material
- Sensitive at ppm levels
- In situ analysis minimizes excavation of soils
- Real-time analysis reduces costs
- Licensable under US patent # 6,097,785

## APPLICATIONS:

- Environmental remediation (groundwater and soil)
- Environmental monitoring of leaks or groundwater plumes
- Real-time soil analysis for mining, oil exploration, and agriculture
- Safety/industrial hygiene monitoring and assurance

## CONTACT:

Licensing information:

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